



December 13, 2013

To: Executive Board

Subject: **Foothill Transit Arcadia Facility Service and Maintenance Review**

---

### **Recommendation**

Receive and file a report on on-street service and fleet and facility maintenance at Foothill Transit's Arcadia Operations and Maintenance facility.

### **Background**

On February 22, 2013, the Executive Board received a Service and Maintenance Review on both Foothill Transit facilities operated by First Transit, as well as an action plan developed with First Transit to address service quality issues.

At the October 25, September 27, and August 30, 2013 meetings, the Executive Board received and filed reports on Foothill Transit's bus service and fleet and facility maintenance operated by First Transit Arcadia. These reports provided information on First Transit Arcadia's safety, service delivery, maintenance, and customer service performance. Of particular concern were increases in missed service due to operator and vehicle shortages. The most frequent occurrence of this missed service took place in July 2013. Decreased customer satisfaction with service provided from the Arcadia Operations and Maintenance facility was also evidenced by an increase in complaints received via Foothill Transit's customer comment process and during public comment at meetings of the Executive Board.

Foothill Transit's Arcadia facility operates 15 lines, including the Silver Streak, Line 187, and Line 690, utilizing 121 compressed natural gas (CNG) buses and 23 diesel buses. First Transit provides these services through the employment of 395 coach operators, dispatchers, technicians and administrative personnel.

As outlined in the contract, the operations and maintenance contractors:

"...shall coordinate, manage, and control all activities necessary to perform Work and carry out its responsibilities under this Agreement, which include, but are not limited to, the following: maintaining all Revenue Vehicles and Non-Revenue Vehicles; providing Non-Revenue Vehicles for support and relief; providing operators, mechanics and all other project personnel, training personnel as necessary; developing administrative procedures and financial records; providing security for the Revenue and Non-Revenue Vehicles and the Facility; and developing methods to improve effectiveness and maximize service efficiency."



Maintaining adequate staffing levels has been a challenge for First Transit at Foothill Transit's Arcadia location. During the proposal process, First Transit estimated needing a minimum of 269 FTE operators to provide service from the Arcadia location. In July 2013, First Transit Arcadia employed an average of 268 operators, with 231 operators available to work on any given day (a 14% shortage). In November, First Transit Arcadia employed an average of 292 operators, with 243 operators typically available to work.

Mechanics employed by the previous Arcadia contractor were hired with the provision that they each obtain Automotive Service Excellence (ASE) certification by June 30, 2013 – a period of one year from their hire date. Out of 29 technicians, 14 (50%) did not meet this deadline. Since June, First Transit has recruited 22 new technicians to fill those positions for a total of 37 technicians currently employed.

### **Analysis**

The sections below provide additional information on First Transit's performance at the Arcadia Operations and Maintenance Facility.

### **Safety**

Safety is Foothill Transit's primary goal. To measure the effectiveness of our safety initiatives, we have established a performance target of 0.60 preventable accidents per 100,000 miles for FY 2014. Preventable accidents are defined as: 1) accidents caused by a worker's failure to do everything that he or she could reasonably be expected to do to prevent the accident, or 2) accidents caused by the vehicle operator's failure to react reasonably to the error of others. The chart below reports the 12-month performance of First Transit Arcadia in comparison to system-wide performance.

<b>Month</b>	<b>Arcadia Performance</b>	<b>System Performance</b>
December 2012	2.38	1.22
January 2013	0.34	0.43
February 2013	1.15	0.78
March 2013	0.52	0.61
April 2013	0.52	0.61
May 2013	0.68	0.60
June 2013	0.54	0.54
July 2013	1.02	0.68
August 2013	0.51	0.42
September 2013	0.54	0.45
October 2013	0.50	0.50
November 2013	0.54	0.54
<b>12-Month Average</b>	<b>0.77</b>	<b>0.62</b>



First Transit Arcadia's October and November preventable accident performance were both 0.50 accidents per 100,000 miles. While this meets the target of 0.60 accidents per 100,000 miles, First Transit Arcadia's 12-month average of 0.77 accidents per 100,000 miles continues to be higher than the established performance target, as well as higher than the system-wide average.

### **Service Delivery**

Missed service is monitored as an indicator of the quality of service provided to Foothill Transit customers.

Missed service miles at First Transit Arcadia decreased 72 percent from July to November, but First Transit Arcadia still continues to miss significantly more service than First Transit Pomona. **Table A** below summarizes missed service at First Transit Arcadia and First Transit Pomona. **Table B** shows causes of missed service at First Transit Arcadia. The data are calculated from invoices and internal operations reports provided by First Transit and thus reflect a higher number of missed trips than estimated in previous board reports.

<b>Table A</b>						
<b>Month</b>	<b>First Transit Arcadia</b>			<b>First Transit Pomona</b>		
	<b>Trips with missed service<sup>1</sup></b>	<b>Missed service miles</b>	<b>Scheduled service miles</b>	<b>Trips with missed service<sup>1</sup></b>	<b>Missed service miles</b>	<b>Scheduled service miles</b>
July 2013	292	5,520	475,968	7	107	416,211
August 2013	140	2,271	475,968	24	465	416,211
September 2013	181	2,829	451,602	24	478	390,343
October 2013	126	1,916	482,952	24	464	425,854
November 2013	99	1,535	445,824	11	192	383,774

<sup>1</sup>Trips on which any portion of scheduled service was missed.

<b>Table B</b>				
<b>Service miles missed by First Transit Arcadia</b>				
<b>Month</b>	<b>Cause</b>			<b>Monthly total</b>
	<b>Operator issues</b>	<b>Mechanical issues</b>	<b>Other<sup>1</sup></b>	
July 2013	3,903	1,417	200	5,520
August 2013	322	1,822	127	2,271
September 2013	975	1,638	216	2,829
October 2013	109	1,672	134	1,916
November 2013	149	1,361	25	1,535

<sup>1</sup>Includes accidents, emergencies, passenger disruptions, and traffic.



First Transit has reduced operator-related causes of missed service at the Arcadia facility. From July to November, service missed by First Transit Arcadia due to operator-related issues (e.g. shortage of available operators) dropped 96 percent. This improvement is due to increased hiring at the Arcadia facility. In November, First Transit Arcadia had an average of 243 operators available for duty, a five percent increase over the number of operators available in July (231 operators).

However, the contractor continues to miss a substantial amount of service due to mechanical breakdowns. Mechanical problems accounted for 89 percent of service missed by First Transit Arcadia in November.

### **Schedule Adherence**

The Foothill Transit SMART*Bus* System monitors schedule adherence on a route by route basis. On-board GPS units collect time and location data at every timepoint a bus passes. The SMART*Bus* system provides a framework for identifying and addressing schedule adherence issues, even as work continues on improving the data collection process.

### **Roadcalls**

One of Foothill Transit's customer service goals is to provide service with an average of at least 15,000 miles between service interruptions caused by mechanical problems ("roadcalls"). In the last year, performance at First Transit Arcadia has averaged 11,470 miles between roadcalls, while system-wide performance has averaged 14,445 miles between roadcalls.

Month	Arcadia Performance	System Performance
December 2012	20,203	16,959
January 2013	8,488	12,017
February 2013	14,461	16,101
March 2013	13,715	15,833
April 2013	9,106	12,879
May 2013	9,011	12,017
June 2013	8,327	12,038
July 2013	8,543	12,161
August 2013	12,281	15,941
September 2013	12,128	16,780
October 2013	9,219	14,023
November 2013	12,154	16,586
<b>12-Month Average</b>	<b>11,470</b>	<b>14,445</b>

Over the past several months, the First Transit has frequently had to make unscheduled repairs to buses at the Arcadia facility. Common mechanical issues include stalled



engines, faulty transmissions, and oil or coolant leaks. Over the last five months, mechanical problems resulting in missed service have occurred most frequently on the 1400 series (2004 model year), followed by the 1600 series (2006 model year), 1100 series (2000 model year), and 1700 series (2009 model year) buses.

### **Customer Comments**

Another indicator of the level of customer service provided is the number of complaints received per 100,000 boardings. Foothill Transit's performance target for the current fiscal year is 10.25 complaints per 100,000 boardings. Foothill Transit's management team monitors customer comments received via telephone, email, mail, social media, and in person.

Although the customer complaint rate decreased from September to October, the majority of complaints continue to be regarding schedule adherence. The chart below shows the number of complaints received per 100,000 boardings by First Transit Arcadia compared to complaints received system-wide.

Month	Arcadia Performance	System Performance
November 2012	14.91	9.35
December 2012	9.53	9.62
January 2013	7.80	7.26
February 2013	11.45	10.27
March 2013	6.98	7.68
April 2013	10.19	8.28
May 2013	14.58	10.08
June 2013	22.97	19.52
July 2013	20.07	16.35
August 2013	17.89	18.96
September 2013	21.26	18.76
October 2013	16.65	15.86
<b>12-Month Average*</b>	<b>14.52</b>	<b>12.67</b>

\* November 2013 boardings (and thus complaints per 100,000 boardings) were not available at the time this report was prepared.

In October, Lines 480 and 187 (both operated by First Transit Arcadia) received the highest number of schedule adherence complaints. Lines 707, 187 (operated by First Transit Arcadia) and 492 (operated by First Transit Pomona) received the most complaints about operator courtesy.





**Next steps**

On November 12, 2013 staff issued a letter to First Transit stipulating the following performance benchmarks and target dates. Each month, First Transit's progress in meeting these will be tracked and reported to the Executive Board.

On-Time Performance	
Performance Standard	Target Date
75% average monthly on-time performance on all lines operated <sup>1</sup>	December 31, 2013
80% average monthly on-time performance on all lines operated <sup>1</sup>	January 31, 2014
85% average monthly on-time performance on all lines operated <sup>1</sup>	February 28, 2014

<sup>1</sup>The calculation of on-time performance will be manually adjusted upon notification that a detour has impacted service on any given line on any given day.

Fleet Maintenance	
Performance Standard	Target Date
Minimum of 10,000 miles between mechanical service interruptions	December 31, 2013
Minimum of 12,500 miles between mechanical service interruptions	January 31, 2014
Minimum of 15,000 miles between mechanical service interruptions	February 28, 2014

Missed Service	
Performance Standard	Target Date
Fewer than 10 trips missed in any rolling three-day period	December 31, 2013
Fewer than 6 trips missed in any rolling three-day period	January 31, 2014
Fewer than 3 trips missed in any rolling three-day period	February 28, 2014

**Budget Impact**

This is a status update item only. There is no budget impact.

Sincerely,

LaShawn King Gillespie  
Director of Customer Service and Operations

Doran J. Barnes  
Executive Director